

LOCTITE® HHD 3545

February 2019

PRODUCT DESCRIPTION

LOCTITE® HHD 3545 provides the following product characteristics:

Technology	Polyurethane hot melt
Appearance	Clear to light yellow
Product benefits	<ul style="list-style-type: none">• Pressure sensitive• High strength
Solids content, %	100
Cure	Moisture
Application	Device assembly, structural adhesive

LOCTITE® HHD 3545 is a reactive hot-melt adhesive based on polyurethane prepolymers. This adhesive is pressure sensitive and provides high initial strength instantly after joining the parts.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Viscosity, Brookfield - Thermosel, 100°C, mPa.s (cP):	
Spindle 27	6,000
Density @ 25°C, ± 0.05 g/cm ³	1.1
Flash point - see SDS	

TYPICAL CURING PERFORMANCE

Open time @ 25°C, minutes	~1
Preheating schedule @ 100°C, minutes	20 to 30
Application temperature, °C	90 to 110

Open time is the bonding range of a 1 mm bead of molten adhesive on substrate. It is based on room temperature environment. Higher temperature will lengthen the open time while lower environmental temperatures will shorten the open time.

LOCTITE® HHD 3545 cures exclusively by moisture and gains its final strength in 1-5 days. This material, however, exhibits high handling strength instantly after bonding.

Curing is a chemical reaction depending on the following parameters:

- Humidity in the rooms of application and storage
- Moisture content on the substrates
- Permeability of the substrates to be bonded
- Application volume / layer of the adhesive film

The above cure profiles are guideline recommendations. Cure conditions (time and temperature) may vary based on customers' experience and their application requirements, as well as customer curing equipment, oven loading and actual oven temperatures.

GENERAL INFORMATION

Please consult the Safety Data Sheet (SDS) for safe handling information of this product.

Pretreatment

1. The bonding surfaces must be clean, dry and free of oil and grease.
2. Substrate temperature should not fall below 20°C during application.
3. Lower temperatures will lead to early solidification of the adhesive and to a reduced open time, the adhesive might even flake off.
4. The substrates may be preheated if necessary.

Application

1. LOCTITE® HHD 3545 can be applied from heating cartridge guns, from usual syringe type melting equipment.
2. At longer rest periods, melting and application temperatures should be decreased. Longer exposure to higher temperatures can lead to a viscosity increase.

Storage

Store product in an unopened container in a dry location. Storage information may be indicated on the product container labeling.

Optimal storage: 5 to 25°C

Material removed from containers may be contaminated during use. Do not return product to the original container. Henkel cannot assume responsibility for product which has been contaminated or stored under conditions other than those previously indicated. If additional information is required, please contact your local Henkel representative.

Not for product specifications

The technical data contained herein are intended as reference only. Please contact your local quality department for assistance and recommendations on the specifications of this product.

Conversions

$(^{\circ}\text{C} \times 1.8) + 32 = ^{\circ}\text{F}$
 $\text{kV/mm} \times 25.4 = \text{V/mil}$
 $\text{mm} / 25.4 = \text{inches}$
 $\mu\text{m} / 25.4 = \text{mil}$
 $\text{N} \times 0.225 = \text{lb}$
 $\text{N/mm} \times 5.71 = \text{lb/in}$
 $\text{N/mm}^2 \times 145 = \text{psi}$
 $\text{MPa} \times 145 = \text{psi}$
 $\text{N}\cdot\text{m} \times 8.851 = \text{lb}\cdot\text{in}$
 $\text{N}\cdot\text{m} \times 0.738 = \text{lb}\cdot\text{ft}$
 $\text{N}\cdot\text{mm} \times 0.142 = \text{oz}\cdot\text{in}$
 $\text{mPa}\cdot\text{s} = \text{cP}$

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